

What is claimed is:

- Pat D3*
1. A latching system comprising:
    - (a) a base,
    - (b) a closable member,<sup>cover</sup>
    - (c) an elongated member rotatably secured to said closable member, said elongated member including a first connector, and
    - (d) a latch plate assembly hingedly secured to said closable member, wherein said latch plate assembly includes a handle and wherein hinging said handle causes said elongated member to rotate.
  2. The latching system of claim 1 wherein said base includes a second connector adapted to engage a portion of said base, and wherein said first and second connectors are secured at opposite ends of said elongated member.
  3. The latching system of claim 1 wherein said latch plate assembly includes a base plate; and wherein said handle is hingedly secured to said base plate.
  4. The latching system of claim 1 wherein said elongated member includes a rotator clevis secured thereto, and wherein said latch plate assembly further includes a latch lever extending from said handle, said latch lever in mechanical communication with said rotator clevis, whereby when said handle is hinged relative to said base plate said latch lever causes said elongated member to rotate.
  5. The latching system of claim 4 wherein said rotator clevis includes a tube having at least one fork extending therefrom.

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6. The latching system of claim 5 wherein said latch lever includes an engagement member having at least one opposed knob extending therefrom, wherein said at least one opposed knob engages said at least one fork of said rotator clevis.

7. The latching system of claim 3 wherein said base plate includes a beak member hingedly secured thereto, and wherein said handle has an elongated opening defined therein, said elongated opening being adapted to receive said beak member.

8. The latching system of claim 3 wherein said handle is hingedly secured to said base plate by a pivot pin.

9. The latching system of claim 8 wherein said latch plate assembly includes a spring for holding said handle in an open position relative to said base plate.

10. The latching system of claim 7 wherein said handle includes a beak striker plate secured thereto and at least partially disposed in said elongated opening.

11. The latching system of claim 10 wherein said beak striker plate defines a cam surface, wherein said cam surface is adapted for sliding contact with said beak member.

12. The latching system of claim 1 wherein said elongated member comprises an elongated shaft, and wherein said first connector comprises a first hook.

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13. The latching system of claim 12 wherein said base has a first keeper secured thereto, and wherein said first hook is adapted to engage said keeper when said closable member engages said base.

14. The latching system of claim 2 wherein said base has first and second keepers secured thereto, and wherein said first and second connectors are adapted to engage said keeper when said closable member engages said base.

15. The latching system of claim 1 wherein said handle is made of aluminum.

16. The latching system of claim 15 wherein said handle is made by an extrusion process.

17. The latching system of claim 7 wherein said beak member is constructed as a fuselink, whereby said beak member is easily broken without damaging the remainder of the latching system.

18. The latching system of claim 1 wherein said closable member is adapted to engage said base, and said connector is adapted to engage a portion of said base when said closable member engages said base and said elongated member is rotated.

19. The latching system of claim 1 wherein said handle includes a handhold end and a hinge end, and wherein said handhold end has serrations defined therein.

20. The latching system of claim 12 wherein said first hook comprises a tube having a hook member extending therefrom, wherein said elongated shaft is received in said tube and said first hook is secured to said elongated shaft.

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21. The latching system of claim 20 wherein said first hook comprises stainless steel.
22. The latching system of claim 21 wherein said first hook is made using a casting process.
23. A latching system for securing a first object to a second object, said latching system comprising:
- a shaft assembly secured to said first object, said shaft assembly including an elongated member having at least one connector secured thereto,
  - a hinged latch plate assembly secured to said shaft assembly, said hinged latch plate assembly including a handle, and
  - at least one keeper secure to said second object,  
wherein hinged movement of said handle causes rotational movement of said elongated member and cooperation between said at least one connector and said at least one keeper.
24. The latching system of claim 23 wherein said shaft assembly includes a shield portion for rotationally securing said elongated member therein and for securing said shaft assembly to said first object.
25. The latching system of claim 24 wherein said shield portion comprises a pair of spaced inner shield members and an outer shield member, wherein said inner shield members and said outer shield member cooperate to form a tube through which said elongated member extends.

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26. The latching system of claim 24 wherein said latch plate assembly further includes a base plate secured to said shield, and wherein said handle is hingedly secured to said base plate at a first end thereof.

27. The latching system of claim 26 wherein said latch plate assembly further includes a beak member hingedly secured to said base plate at a second end thereof.

28. The latching system of claim 27 wherein said handle has an elongated opening defined therein, said elongated opening being adapted to receive said beak member.

29. The latching system of claim 23 wherein said elongated member comprises an elongated shaft, and wherein said at least one connector comprises at least one hook.

30. A method of latching a cover to a base, said method comprising the steps of:

- (a) closing said cover,
- (b) pivoting a handle associated with said cover,
- (c) rotating an elongated member having at least one connector secured thereto, and
- (d) engaging said at least one connector with a portion of said base, thereby latching said cover to said base.

31. The method of claim 30 wherein said elongated rod includes at least two connectors each secured adjacent opposite ends of said elongated member, and wherein step (d) comprises engaging said at least two connectors with said base.

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32. The method of claim 30 wherein said handle includes a latch lever extending therefrom, and wherein said latch lever engages said elongated member and causes rotational movement of said elongated member.
33. The method of claim 31 wherein said elongated member includes a rotator clevis, and wherein said latch lever engages said rotator clevis.
34. The method of claim 30 further comprising the step of receiving a beak member in an elongated opening in said handle.
35. The method of claim 34 wherein said step of receiving said beak member in said elongated opening in said handle further includes the sub-step of engaging said beak member with a beak striker plate.
36. The method of claim 30 further comprising the step of engaging a beak member with a cam surface associated with said handle, thereby providing secure engagement of said beak member with said handle.
37. The method of claim 31 wherein said base includes at least two keepers secured thereto, and wherein step (d) comprises engaging said at least two connectors with said at least two keepers.
38. The method of claim 31 wherein said elongated member comprises an elongated shaft and said at least connector comprises at least one hook.
39. A method of removing an elongated shaft from a shaft assembly, said method comprising the steps of:

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- a) detaching at least one inner shield member from an outer shield member, wherein, before being detached from one another, said inner and outer shield members cooperate to form a tube through which said elongated rod extends, and
- b) removing said elongated shaft from said tube.

40. The method of claim 39 wherein said shaft assembly is secured to a vehicle.

41. The method of claim 39 wherein said inner shield member and said outer shield member are attached via threaded fasteners.

42. The method of claim 39 wherein step (a) comprises detaching at least two spaced inner shield members from said outer shield member.

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